STATE OF NEVADA
Jim Gibbons, Governor
Department of Conservation & Natural Resources
Allen Biaggi, Director
DIVISION OF ENVIRONMENTAL PROTECTION
Leo M. Drozdoff, P.E., Administrator

March 07, 2007

NOTICE OF DECISION

WATER POLLUTION CONTROL PERMIT
NUMBER NEV0088029

Equatorial Tonopah, Inc.
Tonopah Mine

The Nevada Division of Environmental Protection (NDEP) has decided to renew Water Pollution Control Permit NEV0088029 to Equatorial Tonopah, Inc. This permit authorizes the closure of the approved mining facility located in Nye County. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through NAC 445A.447, to assure the Division that the facility will be properly closed and that public safety and health will be protected.

The Water Pollution Control Permit (WPC Permit) will become effective **March 22, 2007**. The final determination of the Division Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statues (NRS) 445A.605 and NRS 445A.407. All requests for appeals must be filed by 5:00 PM, **March 17**, **2007**, on Form 3, with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Capitol Complex, Carson City, Nevada 89706-5249. For more information, contact Kevin Sullivan directly at (775) 687-9413, or (775) 687-9400, or visit NDEP's Bureau of Mining Regulation and Reclamation website at http://ndep.nv.gov/bmrr/bmrr01.htm.

Comments were received from Great Basin Mine Watch (GBMW) in a letter dated February 23, 2007.

Great Basin Mine Watch comments are presented in *bolded italics* below followed by the NDEP response.

The 2003 "enhancement" of the pit lake has not resolved the long-term problem of poor water quality in the lake…GBMW believes that it is necessary to pursue a more aggressive approach to managing the pit lake in the long term.

As stated in the Fact Sheet for the WPC Permit;

"A Screening Level Ecological Risk Assessment (SLERA) of pit lake water quality was completed in October, 2001 (prior to the pit lake enhancement). The results of the screening-level assessment indicate that the overall risk of toxicity of the water in the Moly Pit to terrestrial and avian wildlife is low. With the exception of aluminum (and fluoride for smaller passerine birds), the remaining constituents that exceeded the No-Observed-Adverse-Effect-Level (NOAEL) based threshold (deemed safe for wildlife) fall below the Low-Observed-Adverse-Effect-Level (LOAEL) based threshold at which toxicological effects may first begin appearing. Based on SLERA and the fact that the Moly Pit is unlikely to be the sole water source for wildlife, especially migratory wildlife, the toxicological threat posed by these chemicals appears to be negligible." (Page 5 of the Fact Sheet)

"Post-closure monitoring of the Moly pit lake will consist of semi-annual water quality (Nevada Division of Environmental Protection (NDEP) Profile II as total recoverable metals) sampling, pit lake depth measurements, and photos. Should pit lake water quality deviate (increasing constituents over time) from the predicted long-term water quality as provided in TABLE 1, then further investigations/actions may be required leading into a more permanent solution." (Page 5 of the Fact Sheet)

Based on current water quality trend analysis, the NDEP and Nevada Department of Wildlife (NDOW) are currently considering the next action which may require enhancement of the pit lake again or more serious measures. (See more detail below)

There needs to be a complete understanding of where pit water may be traveling in the groundwater.

The NDEP recognizes that a 'complete' understanding of pit lake hydrogeology is unavailable. This information is provided in the Fact Sheet:

"Insufficient evidence exists at the present time to assess whether the Moly pit lake is a terminal sink or a flow-through regime. The estimated annual lake evaporation is 56 inches. The average annual precipitation at the site is estimated at 6 inches. This would imply that groundwater inflow is the significant source of pit lake water. Additionally, geochemistry assessments indicate the pit lake water quality is significantly influenced by evapo-concentration of salts within the lake, which again implies terminal sink conditions." (Page 14 of the Fact Sheet)

Based on the report "Pit Lake Study and Final Closure Plan for the Moly Pit" dated February 15, 2002, the Moly Pit is located in the Hall complex of intrusive bedrock, likely containing fracture-flow bedrock groundwater unrelated to the regional valley alluvial aquifer.

The pit was bermed to prevent surface drainage from entering the pit. Average rainfall is approximately 6.0 inches per year with the pan evaporation rate of over 50

inches per year. The evaporative rate during the summer causes a slight decrease in the elevation of the pit lake. Elevations fluctuate each year between 1.0 and 1.5 feet with an overall decrease in pit lake elevation (5,330' in 4/99, 5,328' on 1/12/02 and 5,326' on 10/02/06) over the years.

Direct groundwater sampling needs to be done to clarify whether pit water is traveling away from the pit.

Both monitoring wells PW-6 and PW-9 are considered to be downgradient of all mine components to include the Moly Pit Lake. Both wells have been monitored, at least intermittently, since 1982. Neither well has provided any conclusive evidence of a Moly Pit lake signature. Both wells will continue to be monitored semi-annually as part of the WPC Permit.

…procedures to avoid it's (the pit lake) use by wildlife need to be implemented.

Discussions between Nevada Department of Wildlife (NDOW) and NDEP regarding the necessity of a fence around the pit lake have occurred. Currently the NDOW is not requiring a fence but if the water quality continues to decrease as the data is showing, either a fence will be placed around the pit lake and/or modifications to the pit water will be done. Modifications range from treatment of the pit lake water or backfilling the pit lake to preclude fauna from accessing the water.

There needs to be a procedure for treating the heap draindown water, to a non-toxic level for flora and fauna, prior to release into the ET basins.

All long-term heap draindown components are located below ground, excluding direct access to heap draindown by livestock or wildlife. With respect to toxicity to local re-vegetation, or bio-accumulation of constituents of concern within flora possibly impacting wildlife/livestock via ingestion, the Fact Sheet provides the following observation of local site conditions:

"Although both backfilled process ponds were designed and constructed as ET basins, local site conditions (lack of significant natural vegetation and precipitation) indicate that evapotranspiration may not be a factor in reducing basin outflows to the drainfield." (Page 11 of the Fact Sheet)

The ET basins were designed and constructed with agglomerated alluvium (10 – 15 feet) for treatment of discharge from the heap through perforated pipes located in the agglomerated alluvium to chemically stabilize the drain down fluid. Four monitoring ports with a diameter of three feet in the ET Basins allows for ongoing monitoring, and, if necessary, additional treatment of the ET Basins.

Current flora on the ET basins is minimal due to the limited timeframe for growth (2 seasons), and overall local site conditions, as mentioned above in the Fact Sheet. In addition, the ET basins were constructed with a five foot sand layer above the agglomerated alluvium and a three to five foot alluvium cover on top of the sand - providing separation of the root zone from heap draindown constituents.

As such, the NDEP does not believe, at this time, that flora and fauna toxicity will be a factor.